

### Abstract of the Disclosure

A method of forming a thermoactive binder composite product is performed by injecting a hot dry gas to activate the thermoactive binder. In the preferred embodiment, the hot dry gas is air. The method is particularly beneficial as applied to forming thermoplastic composite products and particularly thermoplastic/cellulose composites. Also part of the present invention is a two stage pressing process in which hot gas is injected during the first stage and the press charge is precompressed. The press charge is then placed in a second consolidation press where the hot gas is no longer injected and it is consolidated and cooled. Machinery for practicing the method includes a platen with a platen press which includes upper and lower platens with a plurality of hot air injection jets disposed on the surface of each platen. The platens are spaced apart and surrounded on the sides by an air-permeable containment shell structure to form a compression chamber to hold the base material to be pressed. Other machinery includes a consolidation press.